INLAND EMPIRE ENERGY CENTER PERMIT TO CONSTRUCT

COMPANY NAME AND ADDRESS

INLAND EMPIRE ENERGY CENTER, LLC (IEEC)
26226 Antelope Road
Romoland, CA 92585
SCAQMD ID #129816

Contact: Francisco Escobedo, (951) 928-5941

EQUIPMENT LOCATION

INLAND EMPIRE ENERGY CENTER, LLC (IEEC)
26226 Antelope Road
Romoland, CA 92585

EQUIPMENT DESCRIPTION

Section H of the facility permit: Permit to Construct and temporary Permit to Operate

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions and Requirements	Conditions
PROCESS 1: COMBUSTION AND POWER GENERATION					
SYSTEM 1: GAS TURBINE COMBUSTION					
TURBINE, #1, NATURAL GAS, GENERAL ELECTRIC, MODEL S107H, COMBINED CYCLE, WITH DRY LOW NOx BURNERS, 2,597 MMBtu/HR (at 36 °F) WITH: A/N: ~~456168~~ 495853 GENERATOR, 405 MW GENERATOR, #1, HEAT RECOVERY STEAM GENERATOR (HRSG)	D1 B11 B13	C17	NOx: MAJOR SOURCE	**NOx**: 2.0 PPMV (4) [RULE 2005 BACT, RULE 1703]; NOx: (COMMISSIONING) 68.26 LBS/MMSCF (1) [RULE 2012]; NOx: 7.36 LBS/MMSCF (1) [RULE 2012]; NOx: 123 PPMV NATURAL GAS (8) [40CFR 60 SUBPART GG]; **CO**: 3.0 PPMV (4) [RULE 1303 BACT]; CO: 2,000 PPMV (5) [RULE 407];	A63.1, A99.1, A99.3, A195.1, A195.2, A195.3, A327.1, B61.1, D29.1, D29.2, D82.1, D82.2, E193.1, E193.2, E193.3,

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions and Requirements	Conditions
				VOC: 2.0 PPMV (4) [RULE 1303-BACT]; VOC: 1.4 PPMV (7) [RULE 1303-OFFSET] **PM10**: 7.5 LBS/HR (7) [RULE 1303-OFFSET]; PM10: 0.1 GR/SCF (5) [RULE 409]; PM10: 11 LBS/HR (5) [RULE 475]; PM10: 0.01 GR/SCF (5A) [RULE 475]; **SOx**: 150 PPMV (8) [40CFR 60 SUBPART GG]; SO2: (9) [40CFR 72 – ACID RAIN]; H_2S LEVEL IN NATURAL GAS LESS THAN 0.25 GRAIN PER 100 SCF [RULE 1303-OFFSET]	E193.6 I296.1, K40.1, K67.1
STACK, #1 SERVING TURBINE AND HRSG #1, HEIGHT: 195 FT; DIAMETER: 22 FT, WITH: A/N: ~~456168~~ 495853	S19	C4			
TURBINE, #2, NATURAL GAS, GENERAL ELECTRIC, MODEL S107H, COMBINED CYCLE, WITH DRY LOW NOx BURNERS, 2,597 MMBtu/HR (at 36 °F) WITH: A/N: ~~456169~~ 495584 GENERATOR, 405 MW GENERATOR, #2, HEAT RECOVERY STEAM GENERATOR (HRSG)	D2 B20 B22	C18	NOx: MAJOR SOURCE	**NOx**: 2.0 PPMV (4) [RULE 2005 BACT, RULE 1703]; NOx: (COMMISSIONING) 68.26 LBS/MMSCF (1) [RULE 2012]; NOx: 7.36 LBS/MMSCF (1) [RULE 2012];NOx: 123 PPMV NATURAL GAS (8) [40CFR 60 SUBPART GG]; **CO**: 3.0 PPMV (4) [RULE 1303 BACT]; CO: 2,000 PPMV (5) [RULE 407]; **VOC**: 2.0 PPMV (4) [RULE 1303-BACT]; VOC: 1.4 PPMV (7) [RULE 1303-OFFSET] **PM10**: 7.5 LBS/HR (7)	A63.1, A99.1, A99.3, A195.1, A195.2, A195.3, A327.1, B61.1, D29.1, D29.2, D82.1, D82.2, E193.1, E193.2, E193.3, E193.6 I296.2, K40.1, K67.1

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions and Requirements	Conditions
				[RULE 1303-OFFSET]; PM10: 0.1 GR/SCF (5) [RULE 409]; PM10: 11 LBS/HR (5) [RULE 475]; PM10: 0.01 GR/SCF (5A) [RULE 475]; **SOx**: 150 PPMV (8) [40CFR 60 SUBPART GG]; SO2: (9) [40CFR 72 – ACID RAIN]; H2S LEVEL IN NATURAL GAS LESS THAN 0.25 GRAIN PER 100 SCF [RULE 1303-OFFSET]	
STACK, #2, SERVING TURBINE AND HRSG #2, HEIGHT: 195 FT, DIAMETER: 22 FT A/N: ~~456169~~ 495584	S26	C5			

BACKGROUND

Inland Empire Energy Center (IEEC) is a wholly owned subsidiary of General Electric (GE). It is a recently constructed new power plant located in Romoland, CA. The power plant has two combined cycle, natural gas fired, GE H-series gas turbine generators with a total generating capacity of 810 MW. Both turbines achieved first fire in 2008. However, they have not passed the commissioning phases. The facility encountered some equipment malfunction in October 2008. Both gas turbines had to be shutdown for inspection and maintenance. Turbine #1 has been restarted while Turbine #2 is still currently offline. Due to the equipment shutdown the facility was not able to comply with source testing permit condition D29.1. The facility has applied for a variance 5695-4. The variance was granted.

The facility has discovered that the gas turbines are not able to meet the CO emission rates during startup, as specified in condition E193.2. It applied for a variance 5695-5 to the AQMD Hearing Board. The variance has been approved, and the facility can operate under the variance until September 30, 2009. As a condition of the variance the IEEC is required to submit permit applications to modify the CO emission rates during startup. A copy of the variance is attached in the application folder.

IEEC submitted three applications on February 24, 2009. The purpose is to modify the CO emission rate during startup as required by the variance. IEEC had previously estimated that CO emission rate during a startup was less than 95 lbs/hr. It now estimates that CO emission rate during startup is up to 375 lbs/hr. The facility also intends to increase the startup/shutdown total CO emissions from 300 lbs per event to 500 lbs per event, also specified in Condition E193.2.

On May 12, 2009 IEEC requested to revise the CO emission rate to 800 lbs/hr during the startup and 2,000 lbs per startup/shutdown event.

The following is a list the applications.

Application	Purpose	Fee
495852	Gas Turbine D1 change of conditions	$10,942.07
495853	Gas Turbine D2 change of conditions	$5,471.04
495854	Title V/RECLAIM facility permit modification	$1,687.63

A check of $26,307.30 was received that includes expedited permit processing fee of $8,206.56.

IEEC is a Title V facility. It participates in the RECLAIM NOx program.

COMPLIANCE REVIEW:

This facility is new that just started operation in 2008. A search of the District's compliance database does not find any current notices of violations (NOV) or notice to comply (NC).

DISCUSSION

As the proposed increase of CO emissions limit during startup is significant the District engineer requested on February 27, 2009 that the applicant demonstrate the proposed CO limit is reasonable and comparable to other similar gas turbines. Upon IEEC's request for a further increase of the CO emission rates the District engineer requested additional information on May 19, 2009.

On March 26, 2009 the applicant provided the first response to AQMD's request. It provided the following spreadsheet that contains the combined cycle gas turbine generators recently permitted in the state of California.

Table 1 CO Emissions Limit during Gas Turbine Startup

Project	Equipment	CO (lbs/hour)	CO (lbs/event)
Blythe Energy Project	2 x Siemens V84.3A		3600**
Blythe Energy Project, Phase II	2 x Siemens V84.3A		3600
Gateway	2 x General Electric 7FA		990***
Delta Energy Center (DEC)	3 x Siemens 501F		2514
East Altamont Energy Center (EAEC)	3 x General Electric 7FB		2514
El Segundo Power Plant	2 x General Electric 7FA		
Elk Hills Power Project	2 x General Electric 7FA	3600*	
High Desert Power Project	3 x Siemens 501F		3541
Los Medanos	2 x General Electric 7FA	1821	
Metcalf Energy Center	2 x Siemens "F" technology CTGs	902	2514
Midway Sunset Power Project	2 x General Electric Frame 7FA or Siemens 501F	1851*	
Moss Landing Power Plant Project (MLPPP)	4 x General Electric 7FA		3608
Otay Mesa Generating Project (OMGP)	2 x General Electric 7FA	887	
Palomar Energy Project	2 x General Electric 7FA	3384	
Pastoria Energy Facility	3 x General Electric 7FA	1235	
Russell City Energy Center Project	2 x Siemens 501F		2514
San Joaquin Valley Energy Center	3 x Siemens 501F	902	
Sunrise Power Project	2 x General Electric Frame 7FA	1580*/**	
Sutter Power Plant Project	2 x Siemens 501F	838	
Tesla Power Project	2 x General Electric 7FA	1100**	

Note:

* This is a limit on the combined emissions from two units.

** Per requested modification to CEC conditions of certification.

*** The project owner did request a modification to increase this limit to 5,400 lbs/event (still pending).

Based on the above table the lowest CO emissions limit during a startup is about 790 lbs/hour and 2,514 lbs/hr per event. The proposed CO emissions limits of 800 lbs/hr and 2000 lbs/event are comparable to the data provided in the above table.

On May 12, 2009 the applicant requested for an even higher CO emission limit of 800 lbs/hr and 2,000 lbs/event. The applicant provided recent operation data of CO emissions during a cold startup. The hourly emissions vary from 188 lbs/hr to 460 lbs/hr and the event total emissions vary from 131 lbs/event to 695 lbs/event.. The applicant anticipates that the oxidation catalyst performance will degrade over time, and that it is necessary to project future emissions when the oxidation catalyst is at a lower efficiency. The applicant assumed the worst case scenario of 78% efficiency following a 15-minute warm-up period. Based on this operating scenario the CO emission limit would be 664 lbs/hr and 1,858 lbs/event. To allow a compliance margin the applicant proposed the 800 lbs/hr and 2,000 lbs/event limits.

The applicant also provided CO emissions data of the Bagland Bay 9H gas turbine. The Bagland Bay turbine is the only other H series gas turbine that is in service, even through it operates at

3,000 rpm (50 Hz). Data of the three separate start events show CO emissions ranging from 711 to 1,634 lbs. The Bagland Bay turbine is not equipped with an oxidation catalyst. The applicant points out that there is some difference of the temperature-matching protocol between the Bagland Bay and the IEEC gas turbines that could have an effect on CO emissions during startups.

Due to the significant increases of CO emissions AQMD communicated to IEEC on May 19, 2009 of the following concerns:

1. Will the change lead to an increase of monthly and annual CO emissions? If so, there is a potential that the project will trigger BACT, and PSD analysis.
2. Will the increase in emissions trigger a Rule 212 public notice requirement?
3. AQMD needs IEEC to explain the proposed 2,000 lbs/startup CO emissions rate, in comparison to the Bagland Bay 9H turbine, is justified.

The following is the response provided by IEEC in a letter dated June 9, 2009..

1. Although the CO startup emissions will get higher the gas turbines annual and monthly emissions will not increase. Condition A63.1, which establishes a monthly emission limit, will not be modified. IEEC will manage the operation accordingly to ensure that the annual and monthly emissions remain the same. As there are no projected increases of monthly and yearly emissions the project will not trigger BACT, or PSD analysis.
2. As there is no increase of averaged emissions Rule 212 public notice is not necessary.
3. IEEC contends that the differences between the IEEC and Bagland facility, including site elevation, turbine speed, temperature matching algorithm, contribute to the higher CO emission rates at the IEEC facility.

The AQMD engineer considers the responses to be adequate.

EMISSIONS

The proposed change of CO emissions limit would have caused increases to the 30-day average emission rate if the existing monthly operation schedule is maintained. The following table demonstrates the potential difference in averaged CO emissions. NOx and VOC emissions are not expected to increase. Since the fuel consumption of the startup remains the same the PM10 and SOx emissions are expected to be unchanged.

The 30-day average emissions are calculated by assuming a 31-day period that includes 31 startup hours and 713 base load hours.

	Post-Modification	Current (A/N456168)
Startup CO emission rate (lbs/hr)	800	50
Startup hours	31	31
Startup CO emissions (lbs)	24,800	1,550
Normal operation CO emission rate (lbs/hr)	11.47	11.47
Normal operation hours	713	713
Normal operation CO emissions (lbs)	8,178	8,178
Monthly total CO emissions (lbs)	32,978	9,728
30-day averaged CO emissions (lbs/day)	1,099	324

However, as indicated in the previous section, IEEC will modify operation schedule accordingly so that the monthly total emissions, and the averaged emission rate, does not exceed the values of the current condition A63.1.

RULES EVALUATION

40CFR PART 60 SUBPART GG – NSPS FOR GAS TURBINES

NSPS applies to this project since the turbine heat input is greater than the 10.7 gigajoules per hour threshold. Actual unit rating is 2,597(10^6) Btu/hr X 1,055 joules/Btu = 2,740 gigajoules/hr. The applicable standards are determined in Appendix F, and the results are:

NOx = 123 ppmv
SOx = 150 ppmv

The application proposes NOx limit of 2.0 ppmv, and the facility will use natural gas of sulfur content less than 0.25 grains per 100 scf. Compliance is expected. A performance test is required within 180 days of startup.

40CFR Part 60 Subpart KKKK – Standards of Performance for Stationary Combustion Turbines

Subpart KKKK applies to gas turbines that are installed after February 18, 2005 and have a heat input greater than 10.7 gigajoules per hour (10 MMBtu/hr). The IEEC gas turbines were installed after February 18, 2005; and they have a heat rating of 2,597MMBtu/hr. Thus, they are subject to this subpart.

This regulation requires the gas turbines to meet NOx and SO_2 emission limits, which are determined based on the turbine's heat rate and fuel type. NOx limits are provided in Table 1 of the subpart. For new turbines firing natural gas that are greater than 850 MMBtu/hr the NOx limit is 15 ppmv at 15% O_2. The SO_2 standard is 110 ng/J, or 0.9 lb/MWhr for units located in a continental area. The IEEC units have a NOx limit of 2.0 ppmv, and a SO_2 limit equivalent to 0.006 lb/MWhr. Compliance with the emission limits is expected.

In addition to the emission limits Subpart KKKK requires continuous monitoring of the unit operation to ensure compliance. For units that use SCR and water injection to control NOx emissions it is required to install a CEMS, and to conduct a performance test within 60 days of installation. The operator is required to measure fuel sulfur content or to have tariff sheet attesting that sulfur content is less than 0.05% by weight. The IEEC has installed a NOx CEMS for each gas turbine in accordance with the SCAQMD rules. The installation of the CEMS satisfies the requirements for NOx monitoring. The IEEC will prepare and issue all reports as required and maintain all appropriate records. The pipeline natural gas will have sulfur content below 0.05% as it is subject to Rule 431.1. Thus, compliance with monitoring requirements is expected.

40CFR PART 63 – NESHAPS FOR STATIONARY SOURCES

As determined in Appendix B of previous gas turbine application no. 439481, the facility total HAP emissions from all HAPs are 21 tons per year (tpy). The facility total maximum HAP emissions from a single HAP are 8.24 tpy (formaldehyde). Thus, because HAP emissions from the IEEC facility are below the major source thresholds of 10 tons per year for a single source or 25 tpy for a combination of HAPs, the IEEC facility is not major source of HAP. Thus, the gas turbines and the auxiliary equipment are exempt from this regulation.

40CFR PART 64 – COMPLIANCE ASSURANCE MONITORING (CAM)

The CAM regulation applies to major stationary sources that use control equipment to achieve a specified emission limit. The rule is intended to provide a "reasonable assurance" that the control systems are operating properly to maintain compliance with the emission limits. The turbines are major sources for NOx, CO, and VOC emissions, and will use control equipment to meet BACT limits for NOx and CO. The external control equipment for NOx and CO consists of the selective catalyst reduction (SCR) and oxidation catalysts. VOC emissions are controlled by the use of natural gas and by efficient combustor design, but not by use of an external device. Therefore, the CAM rule applies to NOx and CO emissions. Since there is no add-on control equipment used to meet the VOC limit this regulation would not apply for VOC.

Compliance with the BACT limits for NOx and CO will be through real time monitoring by CEMS. The NOx CEMS will be certified in accordance with Rule 2012 requirements and the CO CEMS will be certified in accordance with the Rule 218 requirements. Compliance with the VOC limit will be determined by periodic source testing. Compliance with this regulation is expected.

40CFR PART 72 – ACID RAIN PROGRAM

This facility is subject to the requirements of the Federal Acid Rain program. The facility is required to apply for a federal permit (Title IV). The acid rain program is similar to RECLAIM in that facilities are required to cover SO_2 emissions with "SO_2 Allowances" (similar to RTCs), or purchases of SO_2 on the open market. It is expected that the IEEC will purchase SO_2 allowance in the open market. The plant is also required to monitor SO_2 emissions through use

of fuel gas meters and gas composition analysis (use of emission factors is also acceptable in certain cases) or with the use of exhaust gas CEMS. It is expected that IEEC will comply with the monitoring requirements of the acid rain provisions with the use of gas meters in conjunction with gas analysis.

RULE 212 – STANDARDS FOR APPROVING PERMITS

The proposed change of conditions will not have emission increases. It will not trigger Rule 212 public notice.

RULE 218 – CONTINUOUS EMISSION MONITORING

The IEEC has installed CO CEMS for the two gas turbines and the auxiliary boiler in accordance with this rule. Compliance is demonstrated.

RULE 401 – VISIBLE EMISSIONS

This rule limits visible emissions to an opacity of less than 20 percent (Ringlemann NO. 1), as published by the US Bureau of Mines. Violations of the visible emission requirements are not expected from the natural gas fired gas turbines.

During the first fire of Unit 1 CEC staff observed visible emissions. CEC staff had also observed on another occasion that there were visible emissions from the stacks, presumably during a cold startup. Upon notification of the incidents AQMD compliance staff investigated the visible emissions, and determined that the opacity to be less than 20 percent. AQMD compliance staff did not issue a notice of violation for the visible emissions.

RULE 402 – NUISANCE

This rule requires that a person not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which cause, or have a natural tendency to cause injury of damage to business or property. Operation of the gas turbines are not expected to create a public nuisance based on experience with other turbines operating under normal conditions.

RULE 407 – LIQUID AND GASEOUS AIR CONTAMINANTS

This rule limits CO emissions to 2,000 ppmv, and SO_2 emissions to 500 ppm for equipment not subject to the emission concentration limits of 431.1. Since the turbines are subject to the requirements of Rule 431.1, the sulfur limit is exempted. The CO limit of 2,000 ppmv of this rule does apply. The CO emissions of the gas turbines will be controlled by an oxidation catalyst, and are expected to be less than 3 ppmv at 15% O_2 level. During the startup and assuming the maximum limit of 800 lbs/hr the equivalent concentration limit can be estimated by using the following calculations:

800/17.2*3 = 140 ppmv

The above calculation is based on the mass emissions rate of 17.2 lbs/hr at 3 ppmv.

Compliance is expected, and will be verified through CEMS data.

RULE 409 – COMBUSTION CONTAMINANTS

This rule limits PM emissions to 0.1 grain/scf calculated at 12% CO2 or 0% O2. This is based upon the relation between CO2 and O2 concentration derived based on the EPA Method 19 F-factors. For natural gas combustion, the formula reduces to %CO2 = 0.5713 (20.9-%O2) and is an attached graph for easier reference. The equipment is expected to meet this limit based on the calculations shown below:

For the gas turbine, the PM10 emissions are 7.5 lbs/hr at 15% O2 for one turbine. Estimated exhaust gas using the data provided in Table 7:

Exhaust = 1,000,305 DSCFM = 60 MMdscf/hr

$$\text{PM10} = \frac{7.5*7000}{60*10^6} x \frac{20.9-0}{20.9-15} = 0.00308 \text{ grain/dscf}$$

RULE 431.1 – SULFUR CONTENT OF NATURAL GAS

The pipeline quality natural gas to be supplied to the facility is expected to comply with the 16 ppmv sulfur limit (calculated as H_2S) specified by this rule. IEEC has provided a gas analysis (Refer to Appendix D) that demonstrated sulfur content of less than 0.25 gr/100 scf, which is equivalent to sulfur concentration of about 4 ppmv. It is also much less than the 1gr/100 scf limit typical of commercial grade natural gas. Compliance is expected.

RULE 475 – ELECTRIC POWER GENERATING EQUIPMENT

This rule applies to power generating equipment greater than 10 MW installed after May 7, 1976. Requirements are that the equipment must meet a limit for combustion contaminants (combustion contaminants are defined as particulate matter in AQMD Regulation I) of 11 lbs/hr or 0.01 grain/scf. Compliance is achieved if either the mass limit or the concentration limit is met. Mass PM10 emissions from each of IEEC turbine's are estimated at 7.5 lbs/hr. Thus compliance is anticipated. Compliance will be verified through the initial performance test as well as periodic testing required by Title V.

REGULATION XIII – NEW SOURCE REVIEW

This regulation applies to new or modified sources that have increased emissions of non-attainment pollutants. The proposed change of condition will have increased emissions of CO. At the time when the original application was submitted in 2005 CO is a non-attainment pollutant that is subject to this regulation. Since the device is under permit to construct and temporary permit to operate it is subject to the requirements of this regulation.

1. BACT

BACT applies if there is an increase of emissions on the daily basis. The increase of CO emissions during startup will have a higher daily maximum emission rate, and will trigger BACT.

Based on the available data of comparable gas turbine generators startup emissions the proposed CO emission rate is acceptable and considered in compliance with BACT.

2. Modeling

The most stringent ambient air quality standards for CO are 20 ppm (23,000 $\mu g/m^3$) for one hour, and 9 ppm (10,000 $\mu g/m^3$) for 8 hours. The applicant shall demonstrate that each permitted unit will not cause a violation of the ambient air quality, or cause a significant impact. In 2005 the application conducted the modeling analysis to access the 1-hour and 8-hour CO impacts of the project. The applicant studied the combined impacts of one turbine at 775 lbs/hr (commissioning) and the other at 17 lbs/hr (normal operation). Including the background emissions the total impacts were 814.7 $\mu g/m^3$, 1-hour average and 473.8 $\mu g/m^3$, 8-hour average. Both impacts were below the most stringent air quality standards.

The proposed increase of CO emission limit to 800 lbs/hr will require a reassessment of air quality impact. The worst operating scenario would be two units undergoing startup simultaneously, resulting a maximum CO emission rate of 1,600 lbs/hr. By extrapolation the applicant estimates that the 1-hour impact would be 1,645.9 $\mu g/m^3$ and the 8-hour impact would be 957.2 $\mu g/m^3$. Both are below the most stringent air quality standards.

3. Offset

As CO is an attainment pollutant offset is no longer required.

RULE 1401 – CARCINOGENIC AIR CONTAMINANTS

This rule specifies limits for maximum individual cancer risk (MICR), cancer burden, and non-cancer acute and chronic hazard indices (HI) from new permit rules, relocations, or modifications to existing permits which emit toxic air contaminants (TAC). The change in conditions does not increase emissions of TACs. The analysis performed under the Permit to Construct issued on 8-5-05 does not change. Therefore, no additional Rule 1401 analysis is required for this change in conditions.

RULE XVII- PREVENTION OF SIGNIFICANT DETERIORATION (PSD)

The AQMD and the EPA has entered an agreement on July 25, 2007 that AQMD is re-delegated the PSD authority. AQMD is authorized to issue new and modified PSD permits in accordance with AQMD's Regulation XVII. The provisions of this regulation apply. The South Coast Air Basin (SCAB) is in attainment for CO, NOx and SO_2 emissions. Therefore, a PSD analysis for these pollutants must be conducted. PSD analysis for PM10 and VOC are not required since the SCAB is not in attainment for these pollutants.

The proposed change of conditions does not affect the NOx and PM10 emissions as there are no emission increases.

For CO emissions the proposed change of conditions will not have emission increases on the monthly and yearly basis. It will not be considered as a significant change. Therefore it will not trigger PSD analysis.

RULE 2005 – NSR FOR RECLAIM

Rule 2005 sets forth pre-construction review requirements for new facilities subject to the requirements of the RECLAIM program, for modifications to RECLAIM facilities, and for facilities which increase the allocation. Rule 2005 (c) sets forth requirements for existing RECLAIM facilities and modification to new RECLAIM facilities.

RULE 2012 – MONITORING RECORDING AND RECORD KEEPING FOR RECLAIM

The IEEC facility will be a RECLAIM facility for NOx emissions. The new turbines are classified as NOx major sources for RECLAIM purposes. As such each major source will be required to have a certified NOx CEMS, a totaling fuel meter, and emissions must be reported to the District through a RTU on a daily basis. IEEC will have twelve (12) months from the date of installation of the turbines to install the required emission monitor and have them certified. The facility must submit a CEMS application and plan for AQMD review and approval prior to receiving final certification on the CEMS.

During the commissioning period the NOx CEMS is not certified. The NOx emission factor is 68.26 lbs/MMscf which is calculated in Appendix A, Table A-8.

REGULATION XXX – TITLE V

The subject facility will be subject to Title V requirements because the potential to emit for VOC, NOx, CO and PM10 will exceed the thresholds specified in Rule 3001. The proposed change is considered a minor change to the Title V permit. A proposed permit revision will be prepared for this project. In accordance with Title V requirements, a copy of the proposed permit revision and analysis will be provided to the facility and to EPA for review. The final permit will be issued at the conclusion of the EPA 45-day review period as specified in Rule 3005(c)(2)(B)(ii).

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

The combined cycle facility requires CEQA certification by the California Energy Commission (CEC). The requirements of a CEQA analysis of the original power plant design are met under the CEC licensing procedure (01-AFC-17), which was approved on December 17, 2003. The applications submitted to AQMD on February 3, 2005 which substitutes the F-class turbines with the H-class units received a CEC approved amendment to the AFC on June 22, 2005.

IEEC has completed AQMD Form 400-CEQA and based upon their responses and the scope of the changes in condition, it is the determination by AQMD CEQA staff that no CEQA documentation is required by AQMD staff. However, since the CEC is the lead agency for this project, CEC will make any final determination on their process and subsequent action for this modification.

RECOMMENDATION

Based on the above engineering evaluation the District has reached a determination that this facility is expected to achieve compliance with all applicable rules and regulations. The final Title V permit issuance is contingent upon EPA review and approval. It is therefore recommended that the AQMD issue a Permit to Construct and a temporary Permit to Operate. The equipment shall be included in the Section H of the facility permit, subject to the following conditions.

CONDITIONS

Only the relevant conditions are included in the following sections.

A63.1 The operator shall limit emissions from this equipment as follows:

Contaminant	Emissions Limit
CO	9,728 LBS IN ANY 1 MONTH
PM10	5580 LBS IN ANY 1 MONTH
VOC	3,769 LBS IN ANY 1 MONTH
SOx	1,362 LBS IN ANY 1 MONTH

The operator shall calculate the emission limit(s) by using monthly fuel use data and the following emission factors: PM10 2.93 lbs/MMscf, SOx 0.71 lbs/MMscf.

The operator shall calculate the emission limit(s) by using monthly fuel use data and the following emission factors: VOC 1.79 lbs/MMscf for normal operations, VOC 12.29 lbs/MMscf for startups.

The operator shall calculate the emission limit(s) for CO, during the commissioning period, using fuel consumption data and the following emission factor: 22.19 lb/MMscf.

The operator shall calculate the emission limit(s) for CO, after the commissioning period and prior to the CO CEMS certification, using fuel consumption data and the following emission factor: 4.48 lbs/MMscf.

The operator shall calculate the emission limit(s) for CO, after the CO CEMS certification, based on readings from the certified CEMS. In the event the CO CEMS is not operating or the emissions exceed the valid upper range of the analyzer, the emissions shall be calculated in accordance with the approved CEMS plan.

[Rule 1303 – Offsets]

[Devices subject to this condition: D1, D2]

E193.2 The operator shall operate and maintain this equipment according to the following requirements:

The commissioning period shall not exceed 509 hours of operation for both turbines during the first 180 calendar days from the date of initial start-up.

Startup/shutdown time shall not exceed 4 hours per day per gas turbine, except for a cold startup and combustor-tuning activities which shall not exceed 6 hours per day per gas turbine. For purposes of this condition a cold startup shall be defined as a startup of the gas turbine after 72 hours of non-operation. Combustor-tuning activities shall be defined as all testing, adjusting, tuning, and calibration activities recommended by the turbine manufacturer to ensure safe, reliable, and in-specification operation of the turbine.

Startup/shutdown and combustor-tuning activity emissions shall not exceed 408 lbs/hr NOx and ~~95~~ 800 lbs/hr CO. The startup/shutdown and combustor-tuning activity emissions shall not exceed 803 lbs/event NOx and ~~300~~ 2,000 lbs/event CO.

Monthly startup/shutdown time shall not exceed 31 hours. Shutdown time does not include non-operation time.

The operator shall provide the AQMD with written notification of the initial startup date. Written records of commissioning, startups, and shutdowns shall be maintained and made available upon request from AQMD

[Rule 1303 – BACT, Rule 2005– BACT, Rule 1703-PSD]

[Device subject to this condition: D1, D2]